

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for automatic detection of medical conditions in medical images, comprising the steps of:

~~receiving image data;~~

~~performing a computer-aided detection (CAD) process to detect potential medical conditions in the image data;~~

~~adding a mark in the image data that indicates a detected medical condition during the CAD process;~~

~~automatically and purposefully adding a false mark in the image data that incorrectly indicates a detected medical condition during the CAD process to compel manual review of marked image data; and~~

~~outputting marked image data comprising one or more marks that indicate a detected medical condition, or one or more false marks, or both~~

inputting image data of a patient to a computer-aided detection (CAD) tool;

processing the image data to detect regions of interest in the image data that have potential medical conditions, wherein during the detection process, the CAD tool:

marks a region of interest in the image data that is determined to have a potential medical condition; and

adds a false mark to the image data; and

outputting, from the CAD tool, marked image data that includes one or more marks that identify regions of interest determined to have potential medical conditions and one or more false marks,

wherein the one or more false marks are included in the marked image data so that a medical practitioner is compelled to manually review each mark in the marked image data rather than rely solely on results of the CAD tool's detection process.

2. (Original) The method of claim 1, wherein the step of adding a false mark comprises adding a fixed number of false marks in the image data.

3. (Original) The method of claim 2, wherein the fixed number of false marks are added to random locations in the image data.

4. (Original) The method of claim 1, wherein the step of adding a false mark comprises adding a random number of false marks in the image data for each invocation of the automatic detection method.

5. (Canceled)

6. (Original) The method of claim 1, wherein the step of adding a false mark comprises marking a region or structure in the image data that has features similar to a medical condition being evaluated.

7. (Currently amended) The method of claim 1, wherein the step of adding a false mark comprises randomly perturbing a location at which a mark that identifies a

region of interest determined to have a potential medical condition is inserted in the image data ~~to indicate a detected medical condition.~~

8. (Original) The method of claim 1, wherein the medical condition comprises an abnormal anatomical structure.

9. (Original) The method of claim 1, wherein the medical condition comprises a lesion.

10. (Currently amended) The method of claim 1, further comprising rendering the marked image data to display one or more 2D, 3D, or both 2D and 3D images having the one or more marks that identify regions of interest determined to have potential medical conditions ~~or and the one or more~~ false marks.

11. (Currently amended) The method of claim 1, further comprising the step of not including a mark ~~at a location or region~~ in the image data at a region of interest determined to have ~~that is detected as having~~ a potential medical condition.

12. (Currently amended) A computer readable medium tangibly embodying a program of instructions executable by a processor to perform method steps for automatic detection of medical conditions in medical images, the method steps comprising:
receiving image data;

performing a computer-aided detection (CAD) process to detect potential medical conditions in the image data;

adding a mark in the image data that indicates a detected medical condition during the CAD process;

automatically and purposefully adding a false mark in the image data that incorrectly indicates a detected medical condition during the CAD process to compel manual review of marked image data; and

outputting marked image data comprising one or more marks that indicate a detected medical condition, or one or more false marks, or both

receiving image data of a patient;

performing a computer-aided detection (CAD) process to detect regions of interest in the image data that have potential medical conditions, wherein the CAD process;

marks a region of interest in the image data that is determined to have a potential medical condition; and

adds a false mark to the image data; and

outputting marked image data that includes one or more marks that identify regions of interest determined to have potential medical conditions and one or more false marks,

wherein the one or more false marks are included in the marked image data so that a medical practitioner is compelled to manually review each mark in the marked image data rather than rely solely on results of the CAD process.

13. (Previously presented) The computer readable medium of claim 12, wherein the instructions for adding a false mark comprise instructions for adding a fixed number of false marks in the image data.

14. (Previously presented) The computer readable medium of claim 13, wherein the fixed number of false marks are added to random locations in the image data.

15. (Previously presented) The computer readable medium of claim 12, wherein the instructions for adding a false mark comprise instructions for adding a random number of false marks in the image data for each invocation of the automatic detection method.

16. (Canceled)

17. (Previously presented) The computer readable medium of claim 12, wherein the instructions for adding a false mark comprise instructions for marking a region or structure in the image data that has features similar to a medical condition being evaluated.

18. (Currently amended) The computer readable medium of claim 12, wherein the instructions for adding a false mark comprise instructions for randomly perturbing a location at which a mark that identifies a region of interest determined to

have a potential medical condition is inserted in the image data to indicate a detected medical condition.

19. (Previously presented) The computer readable medium of claim 12, wherein the medical condition comprises an abnormal anatomical structure.

20. (Previously presented) The computer readable medium of claim 12, wherein the medical condition comprises a lesion.

21. (Currently amended) The computer readable medium of claim 12, further comprising instructions for rendering the marked image data to display one or more 2D, 3D, or both 2D and 3D images having the one or more marks that identify regions of interest determined to have potential medical conditions ~~or and the one or more~~ false marks ~~or both~~.

22. (Currently amended) The computer readable medium of claim 12, further comprising instructions for not including a mark ~~at a location or region~~ in the image data at a region of interest determined to have ~~that is detected as having~~ a potential medical condition.